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INDEPENDENT STATE AUDITOR'S REPORT ON
CERTAIN ACTIVITIES OF THE
DEPARTMENT OF TELECOMMUNICATIONS
AND ENERGY

OFFICIAL AUDIT
REPORT
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Chapter 350, Section 117 of the Acts of 1919, organized the Department of Public Utilities (DPU) under Chapter 25 of the Massachusetts General Laws. Chapter 164, Section 20 of the Acts of 1997 renamed the DPU the Department of Telecommunications and Energy (DTE). The DTE operates within the purview of the Office of Consumer Affairs and Business Regulation (OCABR).

The DTE is comprised of 11 divisions and its primary mission is to ensure that utility consumers are provided with the most reliable service at the lowest possible cost as determined by its orders; to protect the public safety from transportation and gas pipeline related accidents; to oversee the energy facilities siting process; and to ensure that residential ratepayers' rights are protected under regulations.

For the purpose of this audit, we focused our attention on the Pipeline Safety and Engineering Division (Division) and its responsibility to monitor the safety and security at liquefied natural gas (LNG) storage facilities under their jurisdiction. The Division is responsible for technical and safety oversight of nine natural gas companies, four municipal gas departments and distribution systems of privately owned water companies, as well as enforcement of the state's Dig-Safe Law. The Division is concerned with the inspection of gas facilities for compliance with federal and state regulations; investigation into gas related accidents to determine their cause and make recommendations to minimize recurrences; enforcement of the Dig-Safe Law; inspection and testing of gas meters for accuracy and safety prior to installation; and analysis of technical information in petitions pertaining to the installation of interstate gas transmission pipelines or roadways proposed to be built over existing transmission pipelines. The Division's mission is to monitor and oversee pipeline related issues to protect public safety.

In accordance with Chapter 11, Section 12 of the General Laws, the Office of the State Auditor (OSA) conducted an audit of DTE's monitoring of security and safety at liquefied natural gas (LNG) storage facilities. Our audit was conducted in accordance with applicable generally accepted government auditing standards. The purpose of our review was to determine whether DTE was ensuring that LNG facility operators adhere to regulations regarding the development and reporting of Fire Prevention and Safety Plans, Evacuation Plans, and reports of Operator Personnel Training and participation of local fire and safety officials, and whether DTE was monitoring the safety and security at LNG storage facilities.

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1. MONITORING AND OVERSIGHT OF THE SAFETY PLANS AND TRAINING REPORTS OF LNG FACILITIES NEEDS IMPROVEMENT

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Our audit review revealed that the DTE has not enforced the requirement that operators of LNG facilities submit for review the Fire Study and Prevention Plan, the Evacuation Plan and the Annual Training Program Report for each LNG facility, as required by 220 CMR 112.40 2(g), 112.40 4, and 112.42. When requested, the DTE could not provide us with copies of the required plans, and agreed that they were not in compliance. In

addition, we asked fire and police officials in four communities where LNG facilities are located about their experience with the operators with respect to assisting with development of, and agreeing with strategies of, the required plans and reports. Our review noted that the degree of involvement and communication varied greatly and depended on whether the LNG operator or the community official wanted to do so. By not requiring the operators to submit these plans, the DTE deferred to the operators the responsibility for monitoring and oversight of the safety plans and training reports, as well as the involvement of local officials and had little assurance that the appropriate safety control mechanisms were in place.

As a result of our review, the DTE issued a letter to all operators dated February 1, 2005 requesting that the plans and reports be submitted. Also, the DTE provided us with a copy of a newly developed checklist that the Pipeline Safety Division would use to review the various LNG plans and reports. In response to the audit, DTE indicated that the Director of the Pipeline Safety Division, in consultation with the Department's General Counsel, developed a "checklist" for use when reviewing Annual Training Program Reports, Fire Study and Prevention Plans, and Evacuation Plans. The Department will incorporate this checklist into its General Inspection Procedures Manual ("Procedures Manual") for use in future years.

2. INSPECTIONS OF LNG PLANTS DID NOT CONFORM WITH DTE'S OWN TIMELINE REQUIREMENTS

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Section 8 of DTE's General Inspection Procedures Manual (Procedures Manual) requires that each LNG plant within DTE's jurisdiction be inspected once every 24 months to evaluate the physical condition of the plant and to ensure that appropriate safety and security controls are in place. After an initial review of five of the 20 LNG plants revealed that four had not been inspected within the prescribed timeframe, we expanded our review to include all of the LNG plants. We reviewed all inspections completed for the years 1999 through 2004. This review revealed that 18 of the 20 plants had not been inspected once every 24 months. Twelve plants had the inspections completed between 25 and 30 months, two plants were inspected within 35 months, and four plants exceeded 36 months between inspections. DTE stated that inspections were completed during 1999 for two of the four plants that were over 36 months; however, they could not produce inspection reports for our review. In response to our audit, DTE stated that it would amend the Procedures Manual to clarify that each LNG plant should undergo a standard inspection at least once every two calendar years. This procedure will ensure that all LNG plant inspections are conducted in a timely manner, approximately once every 24 months. Additionally, the Director of the Pipeline Safety Division has developed a system that tracks LNG inspection timelines. The system is based on the date of the last inspection and generates a future inspection schedule. The system is designed to notify inspection and management staff that an inspection of a specified plant needs to be completed by a certain date. The Director of Pipeline Safety will assign an administrative coordinator (separate from the LNG inspection staff) to maintain this system and to assist him in ensuring that LNG plant inspections are being completed in a timely manner.

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Our review of selected inspection reports prepared by the DTE during on-site inspections of LNG plants revealed that the inspection reports did not document that DTE: 1) completed required comprehensive inspections every 48 months; 2) verified compliance with specific requirements set forth under 220 CMR 112; 3) had a managerial review completed of each inspection report; and, 4) conducted exit interviews with the operator's supervisory personnel after some of the inspections.

Section 8 of the DTE's Procedures Manual requires the completion of a comprehensive inspection every 48 months. DTE defined a comprehensive inspection as consisting of two standard inspections conducted over a four year period. However, our review revealed that some sections of the inspection reports were either marked as not inspected or only partially inspected on two consecutive inspection reports. In addition, the DTE uses an inspection report form issued by the federal Office of Pipeline Safety (OPS), thereby not documenting state requirements specific to 220 CMR 112. Also, our review disclosed that supervisory reviews of completed inspection reports were not documented and in the case of several inspection reports, DTE did not document whether exit interviews with operator personnel were ever conducted. In response to the audit, the DTE stated that a checklist which will ensure that each requirement outlined in the state regulations is documented accurately has been developed and will be used concurrently with the OPS checklist when completing all LNG inspections. Additionally, the Pipeline Safety Division has modified the cover sheet for its inspection reports to document the Division Director's review and sign-off of all completed inspection reports. The cover sheet now also requires the inspector to document an exit interview with the LNG operator's supervisory personnel at the end of each inspection, as well as follow-up on any inspection deficiencies.

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INTRODUCTION

Background

Chapter 350, Section 117 of the Acts of 1919, organized the Department of Public Utilities (DPU) under Chapter 25 of the Massachusetts General Laws. Chapter 164, Section 20 of the Acts of 1997 renamed the DPU the Department of Telecommunications and Energy (DTE). The DTE operates within the purview of the Office of Consumer Affairs and Business Regulation (OCABR).

Chapter 25, Section 2 states that the DTE shall be under the supervision and control of a commission consisting of five members appointed by the governor for a term of three years. One member shall have a background and expertise in electricity and energy issues, including issues related to natural gas. Of the remaining four members, one must have a background and expertise in telecommunication issues, one in consumer protection and advocacy issues, and another in cable television issues. The governor designates one member as Chairman.

The DTE is comprised of 11 divisions and its primary mission is to ensure that utility consumers are provided with the most reliable service at the lowest possible cost as determined by its orders; to protect the public safety from transportation and gas pipeline related accidents; to oversee the energy facilities siting process; and to ensure that residential ratepayers' rights are protected under regulations.

For the purpose of this audit, we focused our attention on the Pipeline Safety and Engineering Division (Division). The Division is responsible for technical and safety oversight of nine natural gas companies, four municipal gas departments and distribution systems of privately owned water companies, as well as enforcement of the state's Dig-Safe Law. The Division is concerned with the inspection of gas facilities for compliance with federal and state regulations; investigation into gas related accidents to determine their cause and make recommendations to minimize recurrences; enforcement of the Dig-Safe Law; inspection and testing of gas meters for accuracy and safety prior to installation; and analysis of technical information in petitions pertaining to the installation of interstate gas transmission pipelines or roadways proposed to be built over existing transmission pipelines. The Division's mission is to monitor and oversee pipeline related issues to protect public safety.

The Division acts as the Department's enforcement arm ensuring that operators of natural gas distribution companies, municipal gas departments and other intrastate operators are in compliance with state and federal regulations governing pipeline safety.

The Pipeline Division has six engineers who inspect the facilities and records of the gas companies and municipal gas departments in Massachusetts. These facilities include approximately 19,000 miles of mains, over 1,400,000 services, 20 liquefied natural gas (LNG) plants, 24 propane-air plants, as well as 54.3 miles of gas transmission lines. The inspections are conducted to determine if the companies are complying with the federal and state pipeline safety codes. The Pipeline Division acts as an agent of the U.S. Department of Transportation through the Office of Pipeline Safety (OPS) and enforces 49 CFR Parts 190-199. The Division also enforces Massachusetts' comprehensive gas safety regulations 220 CMR 112. During fiscal year 2004, the Division received a grant from OPS totaling \$456,411, the only federal funding received by the state for the monitoring of the gas pipelines and LNG facilities. In DTE's 2003 Annual Report to the Legislature, the Division wrote:

Security of pipeline facilities has become a major issue since the September 11th terrorist attacks. Natural gas pipelines and their associated facilities are vital to the Massachusetts economy. In 2003, the Pipeline Safety Division continued to inspect high-profile facilities such as LNG and liquid petroleum gas plants, gate stations, and dispatch centers, and worked with gas companies and other government officials to ensure that extra security precautions have been taken to protect gas pipeline facilities and the public.

LNG is natural gas that is cooled to a temperature of approximately -260°F at atmospheric pressure and condenses to a liquid called LNG. LNG is odorless, colorless, non-corrosive, and non-toxic. LNG, when vaporized to a gaseous form, can only be ignited in concentrations of between 5 and 15 percent mixed with air. In addition, LNG, or any vapor associated with LNG, will not explode in an unconfined environment. Thus, in the unlikely event of an LNG spill, there is little chance of a natural gas explosion.

Audit Scope, Objectives, and Methodology

In accordance with Chapter 11, Section 12 of the General Laws, the Office of the State Auditor (OSA) conducted an audit of DTE's monitoring of security at LNG storage facilities. Our audit was conducted in accordance with applicable generally accepted government auditing standards. The purpose of our review was to determine whether DTE was ensuring that LNG facility operators adhere to regulations regarding the reporting of Fire Prevention and Safety Plans, Evacuation Plans,

and reports of Operator Personnel Training and participation of local fire and safety officials, and whether DTE was monitoring the safety and security at LNG storage facilities.

Our audit procedures consisted of the following:

1. Reviewed applicable laws, regulations, reports, and information related to the DTE's monitoring of the safety and security at LNG facilities.
2. Obtained and reviewed all available LNG facility inspection reports for the years 1999 through 2004.
3. Interviewed DTE Management, Legal Division, and Pipeline Safety Division personnel to determine the policies and procedures used to monitor the LNG facilities.
4. Developed a questionnaire for local fire and police officials in communities with a LNG facility and interviewed four fire officials and four police officials concerning their experience and interaction with the operators of the LNG facilities with respect to public safety issues.
5. Interviewed appropriate personnel at the Office of Consumer Affairs and Business Regulation concerning the revenues and expenditures of the Department of Telecommunications and Energy.
6. Reviewed and documented Operators' responses to DTE's request for LNG facility operator compliance with reporting requirements of 220 CMR 112.

Additionally, as part of our audit, we requested clarification from DTE's Legal Division regarding DTE's responsibility to monitor the delivery of LNG by ship to the LNG storage facility in Everett. In a letter dated January 11, 2005 from DTE's General Counsel to the OSA concerning the DTE's jurisdiction over the Distrigas LNG Facility in Everett, the General Counsel stated:

The Distrigas facility is a LNG import terminal engaged in foreign commerce. The Commerce Clause of Article I, Section 8, Clause 3 of the United States Constitution preempts the states from regulating foreign commerce and, therefore, the Department of Telecommunications and Energy does not have jurisdiction to regulate the operation of the Distrigas facility. Instead, the Federal Energy Regulatory Commission (FERC) relies upon its authority to regulate foreign importation of natural gas under Section 3 of the Natural Gas Act, 15 U.S.C. Section 717b, to assert jurisdiction over LNG import terminals such as the Distrigas facility.

AUDIT RESULTS

1. MONITORING AND OVERSIGHT OF THE SAFETY PLANS AND TRAINING REPORTS OF LNG FACILITIES NEEDS IMPROVEMENT

Our audit review disclosed that the DTE has not required the operators of LNG facilities to submit the Fire Study and Prevention Plan, the Evacuation Plan, and the Annual Training Program Report for each LNG facility as required by 220 CMR 112, titled Design, Operation, Maintenance and Safety of Liquefied Natural Gas (LNG) Plants and Facilities. State regulation 220 CMR 112 requires the DTE to obtain and review copies of selected plans for each facility and require the operators to submit changes to existing plans as they are updated.

Specifically, 220 CMR 112.40 2(g) states:

The plan shall include, but not be limited to:

A training program prepared with cooperating local police, fire, and civil defense departments, including, but not limited to, training on controls, piping, and fire equipment, procedures, and emergency drills. Such training program may be augmented by local fire department requirements. An annual report outlining the training program for the preceding year shall be submitted to the Department no later than January 30th of each year. The report shall include the name and job title of operating and maintenance personnel and any appropriate official public personnel that have participated in the program.

220 CMR 112.40 4 states:

Each operator shall file a copy of the written fire study and prevention plan and all updates with the Department's Pipeline Engineering and Safety Division or its successor division.

In addition, 220 CMR 112.42 states:

In association with cooperating local police, fire, civil defense, and other public officials, each operator of an LNG facility or plant shall prepare a written evacuation plan to protect the public in the event of a determined controllable or uncontrollable emergency. Each operator shall review evacuation plans at least annually and revise plans as circumstances warrant. Each operator shall file a copy of the written evacuation plan and all updates with the Department's Pipeline Engineering and Safety Division or its successor division.

When requested, the DTE could not provide us with copies of any of the required plans and agreed that they were not in compliance with these sections.

As part of our review, we selected 5 of the 20 LNG facilities and asked the DTE to provide copies of the plans which the regulations require to be submitted. However, the DTE could not

supply the information because they did not require the LNG operators to submit the plans and reports. In addition, we contacted fire and police officials in four communities where LNG facilities are located and asked them about their experience with the operators with respect to developing and agreeing with Fire Study and Safety Plans, Evacuation Plans, and Operator Training Reports. Our review noted that the amount of involvement varied and depended on the LNG operator or the community official. In one community, the fire official was involved in quarterly training at the facility. In another, a police chief was in his position for six and one-half years without knowing of, or reviewing, the Evacuation Plan for the facility. The fire chief in that same community meets annually with the operator, but stated he does not know if the operator has a Fire Study and Safety Plan or an Evacuation Plan. This fire chief is also the town's Emergency Official.

By not requiring the operators to submit copies of their Fire Study and Safety Plan, Evacuation Plans, and Annual Training Program Reports for review, DTE did not provide adequate oversight of the operators of the LNG facilities. In addition to the requirements of 220 CMR 112, MGL Chapter 164, Section 76 requires DTE to keep itself informed of the manner in which the facilities are conducted with reference to the safety of the public and their compliance with provisions of laws and orders of the department. By not requiring the operators to submit these plans and conducting a review to determine their adequacy, DTE deferred to the operators the total responsibility for safety plans and training reports, as well as the extent of involvement of local officials.

As a result of our review, DTE issued a letter dated February 1, 2005 to all LNG operators reminding them of the regulatory requirements and requesting that plans and reports be submitted (see Appendix I for a list of operators). DTE personnel stated that they will review all plans and will issue notices to each operator that does not comply with 220 CMR 69 *Procedures for the determination of violations... minimum safety standards for LNG Facilities*. Subsequently, according to DTE, all operators have submitted the required plans and reports. However, a review of the plans and reports revealed that several LNG operators informed the DTE that certain plans and procedures contain security related materials and that these materials have been withheld from the plans and reports filed with the DTE. The LNG operators are making the material available at the LNG facility for review by the DTE. According to DTE personnel, the DTE plans to review the plans and reports at the LNG facilities until the situation can be resolved. In

addition, the DTE provided a copy of a checklist that the Pipeline Safety Division will use to review the various LNG plans and reports.

Recommendation

DTE should continue with its recently improved monitoring and oversight of the Safety Plans and Training Reports submitted by operators of LNG facilities and require them to involve local fire, police, and emergency officials in evaluating and updating plans.

Auditee's Response

The DTE responded that the Director of the Pipeline Safety Division, in consultation with the Department's General Counsel, developed a "checklist" for use when reviewing Annual Training Program Reports, Fire Study and Prevention Plans, and Evacuation Plans. The Department will incorporate this checklist into its General Inspection Procedures Manual ("Procedures Manual") for use in future years.

2. INSPECTIONS OF LNG PLANTS DID NOT CONFORM WITH DTE'S OWN TIMELINE REQUIREMENTS

Section 8 of DTE's General Inspection Procedures Manual (Procedures Manual) requires that each LNG plant within DTE's jurisdiction be inspected by DTE once every 24 months. Such inspections are referred to as specialized inspections. Based on our audit review, only one of the five LNG Plants that were part of our initial review were inspected by DTE within the prescribed 24-month cycle. As a result, DTE did not conduct timely reviews to evaluate the physical condition of the plants and ensure that appropriate safety and security controls were in place.

As part of our review, we requested the inspection reports on five of the 20 LNG plants that are subject to DTE jurisdiction. The period of our review was January 1, 1999 through December 31, 2004. The primary purpose of our request was to confirm that DTE was in compliance with their 24-month specialized inspection cycle.

Based upon our review of the dates that were reflected on the inspection reports, four of the five LNG plants were not inspected by DTE within the prescribed 24-month period. Examples from DTE inspection reports of the dates that these plants were inspected by DTE are:

Plant	Inspection Report Date	Inspection Report Date	Inspection Report Date
A	12/20/00	05/17/02	11/16/04 ⁽¹⁾
B	11/18/99	12/12/01 ⁽²⁾	12/16/04 ⁽³⁾
C	11/09/00	05/09/03 ⁽⁴⁾	⁽⁵⁾
D*	11/30/99	12/18/01 ⁽⁶⁾	12/15/03

*DTE and Federal Office Pipeline Safety joint inspection conducted on 07/24/02.

⁽¹⁾Duration between inspections was 30 months

⁽²⁾Duration between inspections was 24+ months

⁽³⁾Duration between inspections was 36 months

⁽⁴⁾Duration between inspections was 30 months

⁽⁵⁾Next inspection not due until DTE's 2005 inspection cycle

⁽⁶⁾Duration between inspections was 24+ months

The remaining LNG Plant that was in compliance with the DTE inspection cycle was inspected by DTE on the following dates:

Plant	Inspection Report Date	Inspection Report Date	Inspection Report Date
E	11/27/00	11/12/02	10/19/04

As a result of our preliminary review, we expanded our testing of DTE inspection reports to include the additional 15 LNG plants. Our expanded review was limited to confirming the inspection cycle for all 20 plants. This review revealed that 18 of the 20 plants had not been inspected once every 24 months. The duration between inspections beyond the 24-month cycle for these plants ranged from a low of 25 months to a high of 41 months. Specifically, 12 plants had inspections completed between 25 and 30 months, two plants were inspected within 35 months, and four plants exceeded 36 months between inspections.

Furthermore, DTE management personnel stated that the DTE Pipeline Engineering and Safety Division inspect each LNG plant on a bi-annual basis. However, our review of the inspection reports for all 20 plants revealed that two of the 12 plants on DTE's 2002 inspection cycle and one of the eight plants on its 2003 inspection cycle were not inspected in compliance with DTE's above stated internal policy. We found that the duration between inspections for these three plants were 41, 35, and 36 months, respectively.

By not conducting field inspections of LNG plants within DTE's prescribed timeframe, its oversight of these facilities appears deficient. As stated earlier, MGL Chapter 164 Section 76 delegates supervisory authority to DTE to "make all necessary examination and inquiries and keep itself informed as to the condition of the respective properties". Timely inspections of

these facilities, as determined by DTE's Procedures Manual, would indicate that the prescribed inspection cycles are important attributes of DTE's supervisory responsibilities to ensure that the operators of these plants are performing their respective functions in a manner that is consistent with the rules and regulations adopted by DTE and the federal Office of Pipeline Safety and to ensure the safe operation of the plants.

In addition, DTE was not able to produce inspection reports for two LNG plants that were purportedly inspected in calendar year 1999. Furthermore, DTE could not readily produce a schedule of LNG facilities subject to inspection.

Recommendation

DTE needs to adhere to its policies and procedures for the review of LNG facilities and should consider developing a procedure to ensure that each LNG plant inspection is conducted on a timely basis. Furthermore, DTE should develop, at a minimum, a procedure whereby the Director of the DTE Pipeline Engineering and Safety Division is responsible for creating a system that would electronically notify its staff that an inspection of a specific plant needs to be completed by a certain date.

Auditee's Response

In its response, the DTE stated that it would amend the Procedures Manual to clarify that each LNG plant should undergo a standard inspection at least once every two calendar years. This procedure will ensure that all LNG plant inspections are conducted in a timely manner, approximately once every 24 months.

Additionally, the Director of the Pipeline Safety Division has developed a system that tracks LNG inspection timelines. The system is based on the date of the last inspection and generates a future inspection schedule. The system is designed to notify inspection and management staff that an inspection of a specified plant needs to be completed by a certain date. The Director of Pipeline Safety will assign an administrative coordinator (separate from the LNG inspection staff) to maintain this system and to assist him in ensuring that LNG plant inspections are being completed in a timely manner.

3. DOCUMENTATION OF LNG FACILITY INSPECTIONS NEEDS IMPROVEMENT

Based upon our review of selected inspection reports prepared by DTE inspectors during on-site inspections of LNG plants located in the Commonwealth, DTE could not demonstrate that the required comprehensive inspection that DTE is required to perform at each plant once every four years was completed.

DTE's Procedures Manual, Section 8.0 requires that each LNG plant within DTE's jurisdiction shall be comprehensively inspected once every four years. In addition, specialized inspections shall be conducted by the DTE at each plant at least once in a 24-month period. Inspections of existing plants will focus on Subpart F through J of 49 CFR 193. DTE's Procedures Manual defines two types of inspections for LNG facilities. A standard inspection is defined as an on-site evaluation for compliance with federal and state standards and incorporates a thorough compliance review of the operator's plans, procedures, programs, records and facilities. A comprehensive inspection is defined as series of standard inspections that cover all of the applicable code sections.

According to DTE personnel, a comprehensive inspection of a LNG plant consists of two standard inspections that the DTE inspector conducts over a four-year cycle. Consequently, there is no comprehensive inspection report generated by DTE. The DTE inspector in the second specialized inspection should examine items that were not covered by the DTE inspector in the first specialized inspection report.

Our review included an examination of the inspection reports on five LNG plants for the period January 1, 1999 through December 31, 2003. DTE was in the process of completing its inspection of those LNG plants under its 2004 inspection cycle and they were not part of our initial review. The selected reports that were reviewed were chosen on criteria determined by OSA staff and included items as size, location, operator and whether the facility was manned or unmanned.

Our review revealed that there are gaps in DTE's inspection reports that would indicate a weakness in DTE's process to conduct a comprehensive inspection of the LNG plants as required by the Procedures Manual cited above. Many of the boxes that are incorporated in the various reports issued by a DTE inspector are either not completed or were marked as not checked. Similarly, there are a number of sections in the inspection reports that indicted that only a partial review of the covered items was made by the DTE inspector.

In addition, during the period of our review of these selected plants' inspection reports, the DTE inspector used several different reporting forms that made verification of DTE's inspection process more cumbersome. However, beginning with 2002, it appears that DTE started to use, at the request of the federal Office of Pipeline Safety (OPS), OPS's Standard

Inspection Report for LNG Facilities (OPS Form-4). Although OPS Form-4 is a very detailed report, it is predicated on compliance with federal standards set forth under Title 49 Part 193 and does not address some of the specific requirements set forth under state requirement 220 CMR 112.00. For example, 220 CMR 112.31 requires that the means for adjusting all adjustable relief devices be sealed, (in a closed housing unit), which exceeds the federal requirements. Consequently, effective with the use of OPS Form-4, there is no documentation contained in DTE's files that would support a review of specific Massachusetts' standards. DTE personnel indicated that a separate checklist will be developed for its inspectors that deals specifically with all 220 CMR 112 requirements that are not covered by OPS Form-4. Such a report would be generated by DTE's Pipeline Engineering and Safety Division and would be included with any OPS Form-4 completed by a DTE inspector. As of the completion of our fieldwork, DTE did not provide us a copy of the proposed checklist.

Furthermore, in connection with our review of the selected inspection reports, there does not appear to be any documentation to support any management review or sign-off of a completed inspection report. Also, although DTE personnel indicated to us that at the completion of each LNG plant inspection, the DTE inspector conducts an exit interview with the operator's supervisory personnel, not all the inspection reports we reviewed included information that would support that exit interviews were in fact conducted at all of these plants.

After our initial review of the inspection reports for the five selected plants, DTE provided us with copies of the inspection reports that were completed by DTE for those plants that were part of its 2004 inspection cycle. Most of the issues raised by the staff from its review of the inspection reports examined from January 1, 1999 through December 31, 2003 were addressed in the 2004 inspection cycle, with the noted exception of a 220 CMR inspection checklist. This checklist is currently being prepared by DTE and is expected to be part of its 2005 inspection cycle.

By not documenting that each LNG plant has received a comprehensive inspection by DTE within the past four years, or more recently, by not documenting that these LNG plants are in compliance with specific Massachusetts standards, as enumerated in 220 CMR 112.00, DTE can not adequately demonstrate that they are meeting its obligations set forth under MGL Chapter 164, Section 76 and is in compliance with Section 8 of its Procedures Manual.

Recommendation

DTE needs to develop a mechanism to ensure that its inspections conform to the requirements set forth in DTE's Procedures Manual and its supervisory roles as set forth under MGL Chapter 146, Section 76. At a minimum, DTE needs to establish a written policy that outlines the scope of each inspector's role in examining a LNG plant and the degree in which the inspector coordinates their examination of that plant with local officials (e.g., fire chief, police commander and/or civil defense coordinator) to ensure that various fire, safety and evacuation plans, as well as other procedures adopted by an operator of an LNG, are reasonable and effective, given the nature of the surrounding community. In addition, DTE should develop a procedure that demonstrates that there is a departmental review by the Director of the DTE Pipeline Engineering and Safety Division or his/her designee, of each inspection report completed by a DTE inspector, and that there is follow-up on any reported inspection deficiencies.

Auditee's Response

In its response, the DTE stated that a checklist which will ensure that each requirement outlined in the state regulations is documented accurately has been developed and will be used concurrently with the OPS checklist when completing all LNG inspections. Additionally, the Pipeline Safety Division has modified the cover sheet for its inspection reports to document the Division Director's review and sign-off of all completed inspection reports. The cover sheet now also requires the inspector to document an exit interview with the LNG operator's supervisory personnel at the end of each inspection, as well as follow-up concerning any inspection deficiencies.

Further Auditee Comments

The Department takes great pride in the important work being done by our Pipeline Safety Division to ensure that Massachusetts' natural gas distribution companies and municipal gas departments are in compliance with the many state and federal regulations governing pipeline safety. Your report highlights three areas where the Department would benefit from improved documentation of our inspection process. We have already implemented several of your recommendations and have substantially completed the implementation of your remaining suggestions.

As evidence of the high importance that the Department regards LNG safety and security, I have created the position of Assistant General Counsel for Pipeline Safety. The Assistant General Counsel will work with the Pipeline Safety Division Director to monitor that all inspections are completed in a timely manner and that all applicable state and federal requirements are adhered to strictly. In addition, the Assistant General Counsel will act as the Department's liaison with local police, fire, and civil defense departments to ensure they play an active role evaluating and updating the LNG safety-related plans.

APPENDIX I

LNG Facilities (As of January 2004)

Company	Location	Year Built	Storage Tanks/Capacity
Bay State Gas	Easton	1972	1 tank at 9,450,000 gallons
	Lawrence	1962-72	5 tanks at 160,000 gallons
	Ludlow	1973	1 tank at 1,218,000 gallons
	Marshfield*	1971	2 tanks at 110,000 gallons
Berkshire Gas	Whately*	2000	2 tanks at 140,000 gallons
New England Gas	Fall River	1970	1 tank at 1,890,000 gallons
Unitil – Fitchburg	Westminster*	1974	1 tank at 49,980 gallons
Holyoke Gas and Electric	Holyoke	1971	4 tanks at 221,760 gallons
Keyspan	Dorchester	1968-71	1 tank at 13,902,000 gallons
	Haverhill	1972	1 tank at 4,788,000 gallons
	Lynn	1972	1 tank at 12,180,000 gallons
	Salem	1969	1 tank at 12,180,000 gallons
	South Yarmouth	1970	1 tank at 2,310,000 gallons
	Tewksbury	1969	1 tank at 12,180,000 gallons
	Wareham*	1974-78	2 tanks at 110,000 gallons
	Westford*	1972	1 tank at 55,000 gallons
Middleborough Gas and Electric	Middleborough*	1970	1 tank at 26,040 gallons
NSTAR Gas	Acushnet	1971-73	1 tank at 2,436,000 gallons 1 tank at 3,654,000 gallons
	Hopkinton	1971-75	3 tanks at 3,654,000 gallons
Westfield Gas and Electric	Westfield*	1971-74	2 tanks at 110,000 gallons

*Unmanned plant.